How to Read the Tables and Figures presented in the Texas HIV Epidemic Profile

Table found in the Summary Analysis Section

Table 1. Morbidity Rank Table

This same table format is used for Total, HIV and STD related morbidity, and for Risk Factor ranking. These tables will be the basic form of numeric information you will be provided in the Summary Analysis section of this profile.

HMAZ 44		
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		Total Morbidity
BDTP	Race/Ethnicity	Score
IDU women	African American	77
IDU men	African American	66
IDU men	Hispanic	55
M/MS	African American	52
F/MS women	African American	46
IDU women	Hispanic	30
F/MS men	African American	27
IDU men	white	25
IDU women	white	24
M/MS	Hispanic	23
M/MS	white	22
F/MS women	Hispanic	18
F/MS men	Hispanic	12
F/MS women	white	8
F/MS men	white	5

HMAZ X – This identifies which analysis zone is being shown by the table. In this example, it represents HMAZ 44.

BDTP – This column identifies which behavioral group and sex is being referred to in a specific row of information.

In this example, the first row of information refers to women who inject drugs.

Race/Ethnicity – This column identifies which racial/ethnic category is being referred to in a specific row of information.

In this example, the first row of information refers to African Americans.

Total Morbidity Score -- This column identifies the total morbidity score for the sub-population described by the combination of BDTP and race/ethnicity columns.

In this example, the first row of information indicates that in HMAZ 44, in IDU African American women, the Total morbidity score is 77 points.

This column has a different title depending upon which factors are used to calculate rank scores. These titles can also help you identify which information is being provided in case other identifying information is not clear. These titles are:

Total Morbidity Score— sum of scores for all HIV and STD morbidity factors.

HIV Morbidity Score – sum of scores for HIV related morbidity factors.

STD Morbidity Score – sum of scores for STD related morbidity factors

Risk Factor Score – sum of scores for risk behaviors identified through TDH funded prevention counseling sites in 1999.

Note: The value of the score has no intrinsic meaning except to provide us with a starting point to look at the morbidity data.

In the discussion for these tables, we will be talking about how a sub-population differs in ranking compared with other sub-populations. A rank is just the position of that sub-population. We have sorted the data in the rank tables so that the highest morbidity or risk is at the top of the graph. The rank for the first sub-population in the table is 1 (IDU African American women), the second is 2 (IDU African American men) and so on. If the score for several sub-populations are the same, they are all assigned the same rank.

Tables found in the Discussion of Risk Populations Section

Table 2. Estimates of Population Size Table

This table is produced for each sub-population in your planning region.

M/MS African Americans

Analysis	Estimated
Zone	Size
1	1,172
5	1,722
11	10,808
12	2,018
14	1,521
15	528
LMAZ 4	3,435
Total	21,204

M/MS African Americans – Identifies subpopulation for which the population estimates are provided.

In this example, this table refers to estimates of high-risk population size for African American men who have sex with men.

Analysis zone – Identifies which analysis zone is referred to on each specific row of information.

In this example, the first line refers to HMAZ 1, Galveston and Brazoria Counties.

Estimated Size – Identifies the estimated population size of the high-risk members of this sub-population for the specific analysis zone identified in the first column (**Analysis Zone**). For specific information on how the estimates are performed, see Appendix XXX.

In this example, the first line identifies an estimated population of 1,172 African American M/MS in Galveston and Brazoria counties who are at high-risk for HIV infection.

Total – Identifies the estimated population size of the high-risk members of this sub-population for the entire planning region.

In this example, the first line identifies an estimated population of 21,204 African American M/MS in the East Texas Planning Region who are at high-risk for HIV infection.

Figure 1. Morbidity Rate Graph

This graphic format allows you to view morbidity rates in a graphic format. By providing this information here in a graphic format, you can more easily compare rates between different analysis zones (In this case we are comparing the different analysis zones in East Texas), and between behavioral sub-populations with similar morbidity rankings (between white and Hispanic F/MS women).

Each morbidity graph plate is divided into 4 separate graphs (A through D).

- **A** Living AIDS case rates. Individuals living with AIDS on Oct 19, 1999.
- ${f B}-{\sf AIDS}$ incidence rates. AIDS cases diagnosed in 1998, calculated using the Oct 19, 1999 data.
- **C** HIV infections reported in 1999 (Oct 19, 1999 data, annualized) and positives reported through HIV Counseling and Testing Sites with initial counseling sessions dated in 1998.
- **D** Gonorrhea and chlamydia case rates for cases reported in 1998.

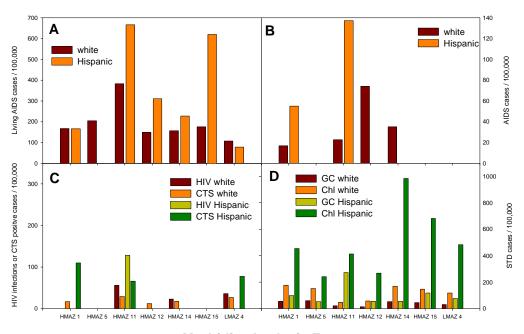
The bottom of each graph (referred to as the x-axis) identifies the HMAZ or LMAZ the rate shown in the bar graph is referring. All graphs in your profile are organized in the same format.

In this example, the HMAZs identified on the x-axis are: HMAZ 1, 5, 11, 12, 14, 15 and LMAZ 4.

The sides of the graph (known as the y-axis) show the scale for the rates indicated by each bar in the graph. You should note that each plate has a different scale, and each graph in your profile may have different scales – Please pay attention to scales!

In this example, in Graph A, the scale for living AIDS cases is from 0 to 700 cases / 100,000. In graph D, the scale for both gonorrhea (GC) and chlamydia (Chl) rates are 0 to 1,000 cases / 100,000.

Morbidity Rates for F/MS Hispanic and white women



Morbidity Analysis Zones

A closer look at the individual graphs

Graph A. This graph shows living AIDS case rates for white and Hispanic F/MS women as of October 19, 1999.

The y-axis (left side) indicates Living AIDS cases / 100,000 (Identifies the morbidity rate illustrated in the graph).

The x-axis (all the way at the bottom of the plate) shows the HMAZs and LMAZ in the East Texas Planning Region.

The legend just under the "A" indicates the dark/brown bars refer to white women and the light/orange bars refer to rates in Hispanic women.

How is this graph read?

The first bar (brown) indicates it refers to whites, The graph refers to F/MS women

Eye-balling from the top of the brown bar to the y-axis (left side) indicates the rate is a little higher than halfway between 100 and 200 about 170. For our purposes here, this should be enough detail. If you want to know the exact value, you can consult the table in the appendix for F/MS white women and find out what the actual rate of living AIDS cases is exactly (167.6, good guess). The rate is thus read "approximately 170 individuals per 100,000 white F/MS women are currently living with AIDS".

This means that if there are 100,000 high-risk F/MS white women in your planning region, there are 170 of these women living with AIDS. If you only have 10,000 high-risk F/MS white women in your planning region, then you would only have 17 high-risk F/MS white women in your planning region.

Graph B. This graph shows the AIDS case rates for 1998, also referred to in the text as AIDS incidence rates. The rates for this graph were calculated based on the number of cases of AIDS diagnosed in 1998.

Look at the tall orange bar in the middle of the graph. The legend indicates that the light/orange color bar represents Hispanics. At the bottom of the graph, you see the graph is from HMAZ 11, Harris County. Eye-balling from the top of the orange bar to the y-axis (this time on the right side of the graph), you can see that the rate is nearly at the top line or near 140 (from the appendix, the rate is 137.3). Therefore, this bar indicates "approximately 140 cases of AIDS in F/MS Hispanic women were diagnosed in 1998".

Graph C. This graph shows rates from two morbidity measures, HIV infection reports from 1999 and positive test results from CTS in 1998. Both morbidity factors measure recent HIV transmission, or at least, more recent transmission than AIDS cases would indicate.

The legend is in the upper right corner of the graph. You should note that we have structured the graph so that the HIV and CTS positives rates are next to each other, if multiple sub-populations are included in the graph.

Look at the bar lines in HMAZ 11 (Harris County). This is the only HMAZ in this planning region with both measures of recent HIV infection for both sub-populations. If a bar is not present or not visible in a morbidity graph, then the morbidity rate for that sub-population is zero.

This graph also illustrates some of the easy comparisons that you can make by ocular poptitude. The rates reported for HIV infections in these populations are slightly higher than the rates observed from positive HIV tests from CTS. You can also see that the rate in Hispanics F/MS women is higher than the rate in white F/MS women, regardless of the indicator of recent HIV infection.

Graph D. This graph shows the rates for gonorrhea and chlamydia cases reported in 1998. The legend is in the upper left corner of the graph. You should note that we have structured the graph so that the rates for each sub-population are adjacent if there are more than one represented in the graph.

The y-axis, like graph B is on the right side of the graph plate. The label for the y-axis indicates STD cases / 100,000. This indicates that the scale for both chlamydia and gonorrhea rates are the same.

Look at the green bar on the far right hand side of the graph. This bar is for the low morbidity zone, or those counties in your planning region which does not fall in a high morbidity analysis zone. This rate is read "the rate of chlamydia infections reported in 1998 from LMAZ 4 is approximately 500 cases / 100,000 F/MS Hispanic women.

Note: Due to variation in the size and magnitude of bars and lines across analysis areas, the legend for each graph may appear in a different position on the graph. In most cases the legend appears within the border of the graph, when this is not possible we have indicated by arrow, which graph the legend is referring to.

Figure 2. Risk Factor Graph

This graphic format allows you to view the proportion of prevention counseling clients who reported specific risk behaviors during sessions performed in 1999 at TDH funded sites. By providing this information here in a graphic format, you can more easily compare rates between different analysis zones (In this case we are comparing the different analysis zones in East Texas), and between behavioral sub-populations with similar morbidity rankings (between white and Hispanic IDU men).

Each risk graph plate is divided into 6 separate graphs (A through F).

- **A** Barrier use. A line illustrates the proportion of individuals who discussed barrier use who never use a barrier to prevent HIV transmission. A separate line is indicated for each site (anal, oral, and vaginal) and for each sub-population represented in the graph.
- **B** Multiple partners. This graph shows the proportion of prevention counseling clients who indicated during the counseling session that they have had multiple partners in the past year. This graph also depicts the

proportion of clients who indicated they felt their sex/needle sharing partner had multiple partners.

- **C** Recent STD diagnosis. The proportion of prevention counseling clients who indicated during the counseling session that they have had an STD diagnosed in the past year.
- **D** Partner at risk. The proportion of prevention counseling clients who indicated during their counseling session that they believed one of their previous sex partners was at-risk for contracting HIV. This risk includes partner who is an M/MS, partner who is an IDU, and partner who has tested positive for HIV.
- **E** Sex Trade. The proportion of prevention counseling clients who indicated during their counseling session that either they have sold or bought sex in exchange for money, drugs, housing or food in the past year.
- **F** Substance Use trends. This graph represents the proportion of prevention counseling clients who indicated they have used an illicit substance during sex in the past year. For sub-populations which include injection drug users, this graph will also show the proportion of those IDU who have injected drugs in the past year who also share injection equipment.

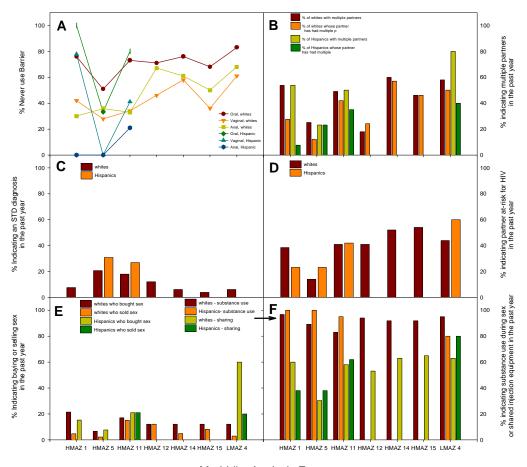
The bottom of each graph (referred to as the x-axis) identifies the HMAZ or LMAZ the rate shown in the bar graph is referring. All graphs in your profile are organized in the same format. Even though these are labeled as morbidity analysis zones, this graph still refers to risk information, we just sort the information based on geographic area –determined by examining morbidity data.

In this example, the HMAZs identified on the x-axis are: HMAZ 1, 5, 11, 12, 14, 15 and LMAZ 4.

The sides of the graph (known as the y-axis) show the scale for the rates indicated by each bar in the graph. You should note that each plate has a different scale, and each graph in your profile may have different scales – Please pay attention to scales!

In this example, all graphs are scaled from 0 to 100% and indicate the proportion of clients who disclosed a specific behavior in the past year.

Risk behaviors for IDU Hispanic and white men



Morbidity Analysis Zone

A closer look at the individual graphs

Graph A. This graph shows the proportion of prevention counseling clients in 1999 who discussed barrier use to prevent HIV transmission and who indicated they never used a barrier for anal sex, vaginal sex, or oral sex.

The y-axis (left side) indicates % Never Use Barrier (Identifies the risk factor illustrated in the graph).

The x-axis (all the way at the bottom of the plate) shows the HMAZs and LMAZ in the East Texas Planning Region.

The legend (in the lower right corner) indicates the brown circles refer to oral sex in white IDU men, the upside-down orange triangle refers to vaginal sex in with IDU men, the yellow square refers to anal sex in white IDU men. The blue diamond, triangle and blue circle refer Hispanic men for oral, vaginal and anal sex, respectively.

How is this graph read?

Look at the yellow line with the symbols. This line, according to the legend in the lower right side of the graph, represents the proportion of prevention counseling clients who are white. We know that this graph is for IDU men.

The y-axis label indicates this measure is barrier use during sex, specifically those who have never used a barrier (condom) for anal sex.

Look at where the symbol is located for HMAZ 14 (3rd from right), the North Pine Woods analysis zone, and eye-ball across to the y-axis on the left, you notice it is exactly at 60. Thus, this value would be read "in the North Pine Woods zone, for IDU white men who discussed barrier use, 60% of these men reported never using a barrier for anal sex in the past year".

Graph B. This graph indicates the proportion of prevention counseling clients who indicated they had multiple sex/needle sharing partners in the past year and the proportion of clients who indicated they felt their partner has had multiple partners in the past year.

Look at the cluster of bars on the right side of the graph, these bars represent data from LMAZ 4 or the rural areas of the East Texas Planning Region. We know the graph represents IDU men, from the legend in the upper left corner of the graph, the yellow bar refers to the proportion of Hispanics with multiple partners in the past year. For this graph, the y-axis label is on the right side, eyeballing the top of the yellow bar to the y-axis, we note a value of 80. This value is read "80% of IDU Hispanic men who were prevention counseled in Rural East Texas in 1999 indicated they had multiple partners in the previous year".

Graph C. This graph indicates the proportion of prevention counseling clients who indicated they had an STD diagnosed in the past year.

The first bar on the left side of the graph is brown. From the legend in the upper left corner, we note this bar refers to whites. From the title of the graph plate, we know this data also refers to IDU men. From the x-axis, we identify this bar represents responses from HMAZ 1, Galveston and Brazoria counties, and finally from the y-axis, we identify that the values represented by the bar line are the % of clients who indicated they had an STD diagnosis in the past year, just below 10% by eye. This bar line reads "approximately 7% of white IDU men who were prevention counseled in 1999 indicated they had an STD diagnosed in the past year".

Graph D. This graph indicates the proportion of prevention counseling clients who indicated they were at-risk due to a sex/needle sharing partner's risks in the

past year, M/MS or IDU behaviors or because a former or current partner has tested positive for HIV.

Look at the two bars for HMAZ 11, Harris County. According to the legend, these bars represent responses for white (brown) and Hispanic (orange) IDU men. Looking at the y-axis on the right, we notice both bars are at the 40% mark on the axis. This value is read "40% of prevention counseled white and Hispanic IDU men indicated they were at risk for contracting HIV through their partner".

Graph E. This graph indicates the proportion of prevention counseling clients who indicated they have either sold or bought sex in exchange for money, drugs, housing or food.

Look at the legend. Which one? The legend on the upper right side has an arrow pointing toward graph F, indicating that legend goes with that graph, so the appropriate legend is in the upper left side. If we look at the y-axis label on the left side, we notice that this graph shows data about buying or selling sex and the legend also mentions buying or selling sex, so we have confirmation that we are looking at the correct legend. Look at HMAZ 15, data from the Pine Woods South analysis zone. This zone only shows data from white IDU men. This means that there was insufficient information to show data on Hispanic IDU men in this analysis zone. By eye-balling the top of the bar to the y-axis (on the left side), we conclude the rate to be about halfway between 10 and 20% (we can always check the tables in the appendix to get a precise number, but most of the time, approximations are all that is necessary). Thus, "in the Pine Woods South analysis zone, approximately 15% of white IDU men have purchased sex in the past year".

Additionally, we can see that the proportion of IDU white men in HMAZ 14 who buy sex is about twice the number that have sold sex in the past year.

Graph F. This graph indicates the proportion of prevention counseling clients who indicated they used drugs during sex. For this specific sub-population, IDU, this graph also contains the proportion of injection drug users who share equipment.

You will first notice that there is no legend inside the frame of Graph F. This is because the presentation format did not provide sufficient room for the legend and we had to move it to Graph G, with an arrow pointing to Graph F.

Look at the data for HMAZ 5, information from prevention counseling clients who reside in Hardin, Jefferson and Orange counties, the Golden Triangle analysis zone. In this case, with sharing information included in the graph, we have placed the sub-populations next to each for substance use during sex, then for sharing. According to the legend, the brown bar represents white IDU men, and by looking at the y-axis, we can determine that the proportion reporting

substance use during sex is approximately 90%. This would be read as "approximately 90% of white male IDU in the Golden Triangle have reported using drugs with sex, at least once, in the past year".

Look at the yellow bar, and tracing the height of the bar to the y-axis, we observe a proportion of about 30%. Thus "approximately 30% of the white IDU men in HMAZ 5 indicated they have shared injection equipment in the past year".